# NOAA

"Where Science Gains Value for America"

# **NOAA's VISION**

An informed society that uses a comprehensive understanding of the role of the oceans, coasts, and atmosphere in the global ecosystem to make the best social and economic decisions.

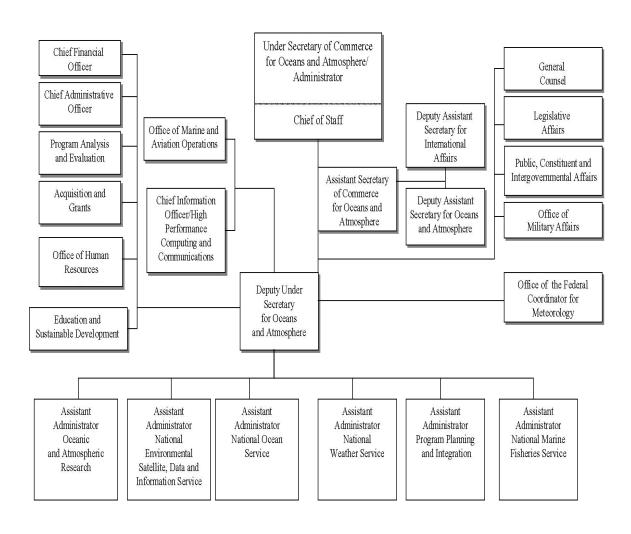
## **NOAA'S MISSION**

To understand and predict changes in Earth's environment and conserve and manage coastal and marine resources to meet our Nation's economic, social, and environmental needs.

# **NOAA'S CORE VALUES**

People, Integrity, Excellence, Teamwork, and Ingenuity

# U.S. Department of Commerce National Oceanic and Atmospheric Administration Organization – 2005



#### To the Reader:

I am pleased to present the Budget Summary for the National Oceanic and Atmospheric Administration (NOAA) for Fiscal Year 2006. As in the past, this summary is designed to provide information in a concise and user-friendly format. We provide these descriptions and data on NOAA's budget and programs for the information of Members of Congress and their staffs, the media, and NOAA's constituents and customers. This summary tells NOAA's story, and describes how this agency supports and enhances the goals of the Commerce Department and the President.

NOAA is where science gains value for the Nation. Americans look to NOAA for an incredible variety of services and support ranging from the local weather forecast, to a sustainable supply of quality seafood, to the safe transport of millions of tons of waterborne cargo, to keep the ocean coastline safe and vibrant, and to maintain detailed research on the climate from the frozen arctic to the depths of the oceans. Through our website at <a href="https://www.noaa.gov">www.noaa.gov</a>, NOAA provides a wealth of knowledge to schools and young people across our Nation, as well as to industry and scientific enterprises.

As our world's population grows to six billion and increasingly stresses our environmental resources, NOAA's capabilities become ever more important. NOAA is a critical part of our Nation's economic structure – its products and services impact the daily lives of every one of our citizens, and have economic consequences which significantly affect our Nation's Gross Domestic Product (GDP). In fact, NOAA touches 30% of the Nation's GDP directly - about \$3 trillion of the American economy. With integrated and sustained observations of the Earth's physical and biological systems, and the web of science and management which form the foundation of NOAA exploration and observation missions, we have the opportunity to better understand the complex interactions taking place on our planet.

NOAA is leading the global effort to expand this understanding through the development of the Global Earth Observing System of Systems (GEOSS), along with over fifty partner nations. A robust GEOSS is critical for us to develop the science necessary to deliver accurate forecasts and hazard warnings, such as for tsunamis and hurricanes, in an ever-changing environment. The recent tragedy in southeast Asia has heightened awareness of the need for a tsunami detection and warning system beyond the Pacific region. With GEOSS, NOAA is ready to lead and support efforts to expand and enhance detection and warning capabilities for the broad spectrum of oceanic and atmospheric hazards the world faces.

The major issues we face today are complex and affect all of our line and staff offices. In order to be effective in attacking the problems of the future, we continue to build a NOAA which supports integrative approaches to solving problems; one which leverages partnerships and is responsive to constituent concerns. The U.S. Commission on Ocean Policy has made it clear that new approaches are needed to managing the oceans, for example. The future of oceans management will require a sustained and committed effort to improving processes government-wide and implementing a cross-cutting, ecosystems-based approach to management that is focused on making the oceans, coasts, and Great Lakes cleaner, healthier and more productive and ensuring that these valuable resources are available for current and future generations to enjoy.

Under the new leadership of Commerce Secretary Carlos Gutierrez, NOAA remains committed to improving the level of service provided to the American people. Finally and most importantly, we appreciate the support NOAA continues to receive from the Congress and our constituents.

Conrad C. Lautenbacher, Jr. Vice Admiral, U.S. Navy (Ret.) Under Secretary of Commerce for

Oceans and Atmosphere

## A NOTE ON TERMINOLOGY:

The reader should be aware of the specific meaning of several terms as they are used throughout this budget summary:

# "FY 2005 Enacted" is:

Fiscal Year (FY) 2005 Appropriation, less rescissions.

# "FY 2006 Base" or "Current Program" is:

FY 2005 Enacted, less Terminations, plus Adjustments to Base.

# "Total Request" is:

FY 2006 Base, plus Program Changes.

# TABLE OF CONTENTS

| Introduction   | 1V        |  |
|--|-----------|--|
| FY 2004 Accomplishments by Goal                                | Chapter 1 |  |
| FY 2004 Performance Measure Results                            |           |  |
| Line Office Summary Budget Table                               | Chapter 3 |  |
| NOAA Operations, Research and Facilities by Line Office        | Chapter 4 |  |
| National Ocean Service   | 4-2       |  |
| National Marine Fisheries Service                              | 4-16      |  |
| Office of Oceanic and Atmospheric Research                     | 4-28      |  |
| National Weather Service                                       | 4-40      |  |
| National Environmental Satellite, Data and Information Service | 4-50      |  |
| Office of Program Planning and Integration                     | 4-56      |  |
| Program Support  | 4-60      |  |
| NOAA Procurement, Acquisition and Construction                 | Chapter 5 |  |
| Systems Acquisition.   | 5-4       |  |
| Construction   | 5-18      |  |
| Fleet  | 5-22      |  |
| Aircraft   | 5-24      |  |
| Other Accounts   | Chapter 6 |  |
| Other Discretionary  | 6-2       |  |
| Other Mandatory  | 6-8       |  |

| Special Exhibits                                      | Chapter 7 |
|---|-----------|
| Summary by Appropriation                              | 7-2       |
| Adjustments to Current Programs (ATBs)                | 7-3       |
| FY 2005 – Terminations                                | 7-4       |
| Marine & Aviation Operations - Planned Operating Days | 7-6       |
| NOAA Estimated Federal Funds for R&D                  | 7-8       |
| NOAA Control Table                                    | . 7-11    |

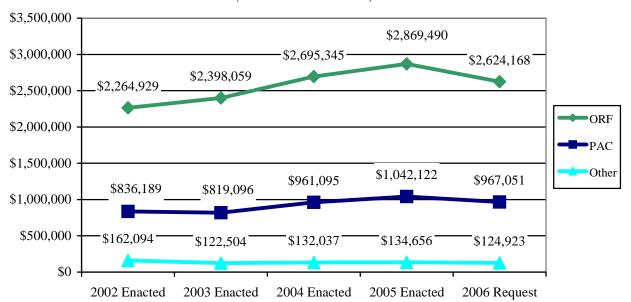
# Introduction

# Introduction

| (Dollars in Thousands)                        | FY2005<br>Enacted | FY2006<br>Base | Program<br>Changes | Total<br>Request |
|---|-------------------|----------------|--------------------|------------------|
| National Oceanic & Atmospheric Administration |                   |                |                    |                  |
| Operations, Research and Facilities           | \$2,869,490       | \$2,466,581    | \$157,587          | \$2,624,168      |
| Procurement, Acquisition and Construction     | 1,042,122         | 882,150        | 84,901             | 967,051          |
| Other Funds                                   | 134,656           | 124,863        | 60                 | 124,923          |
| Financing                                     | (127,580)         | (130,313)      | 0                  | (130,313)        |
|   |                   |                |                    |                  |
| Total NOAA                                    | \$3,918,688       | \$3,343,281    | \$242,548          | \$3,585,829      |
| FTE   | 11,909            | 11,938         | 60                 | 11,998           |

## Budget Trends, FY 2002 - 2006

(Dollars in Thousands)



ORF: Operations, Research & Facilities

PAC: Procurement, Acquisition & Construction

Other: Other accounts

## Introduction



In the Fiscal Year (FY) 2006 President's Budget, the Department of Commerce's National Oceanic and Atmospheric Administration (NOAA) requests a total of \$3,585,829,000, a net decrease of \$332,859,000, or 8.5% below the FY 2005 Enacted Budget. The request is, however, an increase of \$242,548,000, or 7.3% above NOAA's FY 06 Base. This FY 2006 request reflects our continuing effort to better serve the American people through advancing mission-critical services. The NOAA staff of dedicated professionals, working with extramural researchers and our international partners, are extending our knowledge of climatic change, expanding meteorological prediction capabilities, improving coastal resource management, charting more of our seas and coasts, and enhancing environment stewardship.

Total Adjustments to Base (ATBs) are \$74.9 million, which are included in the FY 2006 Base level of \$3,343,281,000. These adjustments focus on maintaining and investing in our workforce and supporting NOAA's most important resource – our people. ATBs are comprised of the cost of inflation, which includes a 2.3% federal pay-raise for FY 2006 and annualizing the FY 2005 pay increase of 3.5%, and also the restoration of rescissions from FY 2005.

## **Priority Program Change Highlights**

The requested total NOAA Program Changes focus on key themes running through this budget, including integration (at both the organizational and systems levels),

partnerships, and early identification of the essential support requirements implicit in NOAA's long-range plans. Scientific research, advanced technology development and operations remain the cornerstones of everything we do.

This budget submission requests the necessary level of resources to carry out NOAA's missions in ways that benefit 1) the economy, 2) the environment, and 3) public safety of the Nation. NOAA is requesting investments in high priority endeavors – specifically, for delivering effective climate and oceanographic products and services, and to enable resource managers to appropriately allocate resources. A summary of the highest priority items in this Budget Summary follow.

#### Ocean Commission-related Initiatives -

The funding increases highlighted in this NOAA FY 2006 Budget Summary are consistent with Administration priorities, including the *U.S Ocean Action Plan* – the Administration's response to the U.S. Commission on Ocean Policy (USCOP, or "Ocean Commission") Report. Released by the Commission on September 20, 2004, *An Ocean Blueprint for the 21st Century* contains the Commission's final recommendations for a new, comprehensive national ocean policy. This FY 2006 budget request includes funding to sustain and enhance critical NOAA programs which support the Commission's recommendations, including \$22.7 million total for Ocean Exploration and \$61.2 million total to support the National Sea Grant program.

#### Global Earth Observations –

Approximately \$94.7 million in net increases will support emerging requirements for NOAA's role in building an integrated earth observing system. The new 'system of

systems' includes observing platforms in space, the atmosphere, the oceans and on land, as well as data management and calibration, and will "take the pulse of the planet" - providing critical scientific data needed to address global economic, social and scientific challenges. With this improved knowledge, decision-makers around the world will be able to make more informed decisions regarding climate, the environment, and a host of other economic and social issues that are affected by Earth's systems.

#### Expanded Tsunami Warning Network –

Within Global Earth Observations, NOAA will commit \$24 million over two fiscal years: \$14.5 million in FY 05 and \$9.5 million in FY 06 to expand the existing six-buoy Pacific Tsunami Warning Network. These funds provide for an additional 32 detection buoys by mid-2007 – seven in the Atlantic Ocean, Caribbean Basin and Gulf of Mexico, and 25

Proposed DART Buoy System

in the Pacific Ocean. The program will also procure 38 new sea level monitoring/tide gauge stations, provide 24/7 warning coverage at the Pacific and Alaska Tsunami Centers, upgrade 20 seismometers used to improve tsunami detection, and expand the TsunamiReady program to improve community preparedness.

### Full Funding for Satellite Systems -

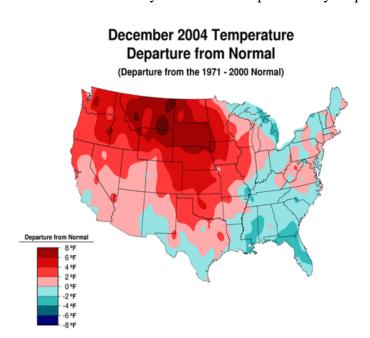
Included within the Global Earth Observations increase is full funding for satellite systems. The \$82.98 million gross increase for NOAA's geostationary environmental satellite (GOES-R) is part of the planned funding profile. This request will fund critical developmental activities, including continuing instrument contracts and the program definition and risk reduction for the overall GOES-R system, to prepare for launch in 2012. The President's Budget also fully funds NOAA's national polar-orbiting satellite (NPOESS) program, an increase of \$16.1 million. The first NPOESS satellite will be launched by February 2010.

#### **Ecosystems Based Fisheries Management –**

NOAA's requests over \$90 million in increases in FY 06 for projects and operations which support fisheries management. An "ecosystems approach" is adaptive, geographically specified, takes into account ecosystem knowledge and uncertainties, considers multiple external influences and strives to balance diverse social objectives in management. Included in this amount are funds for the fishery observers and coral reef programs to help NOAA move towards broader ecosystem based environmental management.

#### **Expands Climate Observations and Services –**

Climate research will benefit from the requested increases of \$19.7 million to expand our Ocean Observations systems and Tropical Buoy capabilities, further our studies on



Aerosol-Climate Interactions to advance the President's Change Science Climate Program (CCSP), enhance our ability to explain climate conditions to improve predictions, and support the Regional Integrated Science Assessment (RISA) teams. An offset of \$1 million is proposed in the Global Climate Atmospheric System. Observing addition, \$7.4 million is requested to sustain operations in climate research activities.

#### **Improve Weather Forecasts and Warnings –**

An additional \$8.7 million is requested to expand and to modernize NOAA Weather Radio, to enhance Information Technology (IT) **National** systems at the Centers Environmental Prediction (NCEP), to improve data assimilation for weather forecasts, and to complete and sustain the NOAA Weather Radio Network.

## **Facilitate Intermodal Transportation**

With \$18.8 million in increases, NOAA seeks to lives, economic investment environmental integrity by providing critical support to the Nation's intermodal transportation network. Funding for Electronic Navigational Charts (ENC) and for accurate currents and water level data is essential to the



Mark Trail image courtesy of North America Syndicate, Inc., World Rights Reserved

safe and environmentally sound transport of goods in the Marine Transportation System. As an example, confirmation of exact water depths can allow a ship to load valuable extra cargo - just one inch of additional draft can increase revenues up to \$50,000. Improving aviation ceiling/visibility forecasting will result in an estimated savings of \$250 million a year in reduced fuel costs to U.S. airlines.

#### **Support Facilities Maintenance & Construction**

There has been substantial growth in NOAA's Facilities Management, Construction and Maintenance program responsibilities to provide effective and efficient services in an environment of scarce resources and aging structures. In order to keep facilities wellmaintained, return substandard facilities to their full potential, and construct and renovate facilities to meet mission requirements, NOAA requests a modest net increase of \$2.3 million, including a planned increase of \$6.2 million for the NOAA Center for Weather and Climate Prediction. With these increases, NOAA will institute several initiatives directed at reducing operating costs associated with our older structures.

The increases and other program changes highlighted above will be addressed in greater detail in the remaining parts of the FY 2006 NOAA Budget Summary. We hope to build on our prior successes by addressing future challenges through implementing the management, operational, and technical enhancements proposed in this Summary.